

Setting payments for results based AE schemes



Outline

- Options for costing AE schemes
- Complicated Baseline
- RBAPS Example
- Conclusions and Recommendation?



Options for Costing AE Schemes

1. What can be paid for and to who?

- Current guidance from Commission AECM support
 - ▣ environmentally beneficial improvements to farming practice
 - ▣ maintenance of existing beneficial practices where these are otherwise likely to be abandoned
- Pay individuals/collective beneficiaries? Can be granted to farmers, groups of farmers or groups of farmers and other land managers
- Joint legal status or formed on “ad hoc” basis- must have internal arrangements among members of group (rules =rights and obligations of each member)
- Eligibility: “agricultural land” but more flexible than “agricultural area” pillar 1. Can pay on semi-natural habitats considered valuable for the environment

Options for Costing AE Schemes

2. Establish your baseline?

- ▶ Must go beyond relevant mandatory standards in CAP i.e. GAEC and SMRs
- ▶ Need to avoid double funding
- ▶ Complicated Baseline
 - ▶ Pillar I payments (BPS and Greening; GAEC and SMRs)
 - ▶ Pillar II
 - ▶ ANC
 - ▶ National AE schemes
 - ▶ Leader etc.
 - ▶ Legal designations
 - ▶ Farmers get paid for multiple often conflicting requirements

Options for Costing AE Schemes

3. Payment calculation/costings?

- ▶ WTO rules-payments limited to extra costs or loss of income
- ▶ RD 1305-2013 Art 28_6 Payments ...annually ...all or part of the additional cost and income foregone....may also cover transaction costs.
- ▶ Ceilings for annual payments per hectare: Annex II RD1305-2013 i.e. €450 except in duly substantiated cases justified in RDP

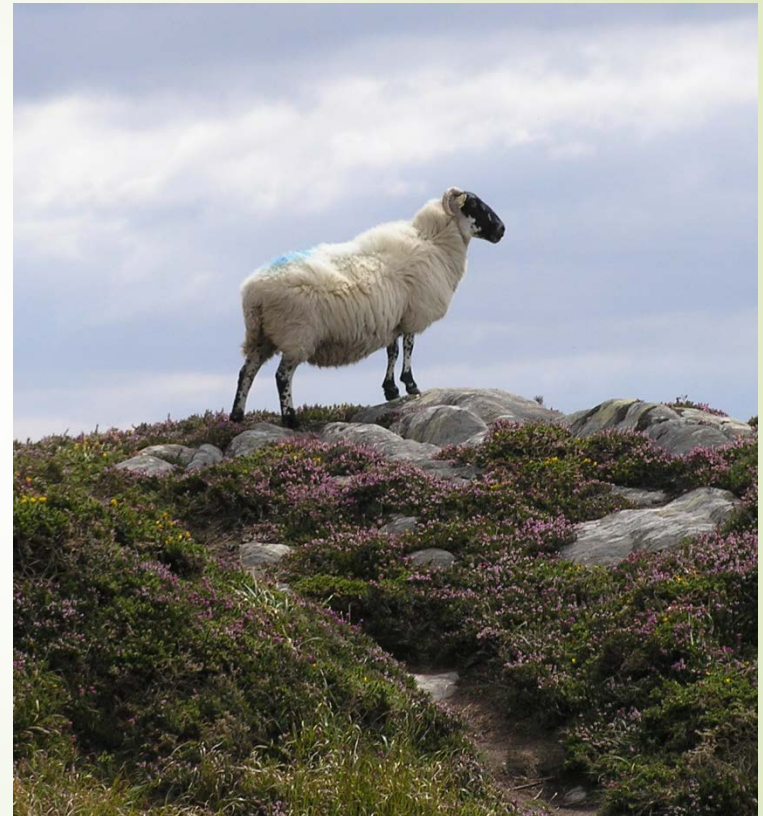
Hill Sheep Socio-Economics

- ▶ Farm profile:
 - ▶ Farm sample = 30
 - ▶ Average farm size 95ha approx.
 - ▶ 38% rough grazing
 - ▶ Average livestock units = 37.2 (13.2 LU cattle)
 - ▶ Stocking rate 0.4 LU/Ha UAA



Hill Sheep Financial Viability

Variable	sub-totals	Totals
No of farm in sample		30
Livestock and crop output		€19,195
<u>Subsidies</u>		
Direct Payments (pillar 1)	€10,363	
Agri-env	€3,168	
DAS	€3,058	
Other income	€874	
Total Subsidies+other		€17,463
Total Gross Output		€36,658
Direct costs	€10,228	
Overhead Costs	€11,687	
Total Costs		€21,915
Gross Margin		€26,430
Family Farm Income		€14,743
Market Return		-€2,720
FFI/ha UAA		€160



Data Source: NFS 2015

Cattle Rearing Socio-Economics

- ▶ Farm profile:
 - ▶ Farm sample = 17
 - ▶ Average farm size 44ha approx.
 - ▶ 16% rough grazing
 - ▶ Average livestock units = 29.2 (0.6LU sheep)
 - ▶ Stocking rate 0.7 LU/Ha UAA



Data Source: NFS 2015

Hill Cattle Rearing Financial Viability

Variable	sub-totals	Totals
No of farm in sample		17
Livestock and crop output		€17,688
<u>Subsidies</u>		
Direct Payments (pillar 1)	€8,773	
Agri-env	€1,164	
DAS	€2,817	
Other income	€1,044	
Total Subsidies+other		€13,798
Total Gross Output		€31,487
Direct costs	€10,158	
Overhead Costs	€11,226	
Total Costs		€21,384
Gross Margin		€21,328
Family Farm Income		€10,102
Market Return		-€3,696
FFI/ha UAA		€243



Data Source: NFS 2015

Financial Viability

	Hill Sheep NFS 2015		Sheep All Farms NFS		Cattle rearing Hill		Cattle rearing all farms	
Variable	sub-totals	Totals	sub-totals	Totals	sub-totals	Totals	sub-totals	Totals
No of farm in sample		30		124		17		147
Livestock and crop output		€19,195		€33,251		€17,688		€27,011
total LU	37.2		53.8		29.2		38.2	
UAA	92.1		50.0		41.5		35.4	
total farm area	94.7		52.2		43.5		36.8	
Rough grazing	36.3		9.4		6.9		2.6	
stocking rate (LU/UAA)		0.40		1.08		0.70		1.08
<u>Subsidies</u>								
Direct Payments (pillar 1)	€10,363		€11,943		€8,773		€8,452	
Agri-env	€3,168		€1,776		€1,164		€808	
DAS	€3,058		€2,395		€2,817		€2,011	
Other income	€874		€1,008		€1,044		€1,609	
Total Subsidies+other		€17,463		€17,122		€13,798		€12,880
Total Gross Output		€36,658		€50,374		€31,487		€39,892
Direct costs	€10,228		€19,754		€10,158		€12,439	
Overhead Costs	€11,687		€17,483		€11,226		€14,793	
Total Costs		€21,915		€37,237		€21,384		€27,232
Gross Margin		€26,430		€33,620		€21,328		€27,453
Family Farm Income		€14,743		€16,137		€10,102		€12,660
Market Return		-€2,720		-€3,986		-€3,696		-€221
FFI/ha UAA		€160		€323		€243		€358

Data Source: NFS 2015

Economic versus Financial Viability (Sustainability)

- Socially beneficial extensive farming practices financially non-viable
- BurrenLIFE Study: Positive values of externalities ranging from €842-€4,420 per ha per annum (Van Rensburg et al 2009)
- Externalities = positive cultural, landscape and biodiversity externalities and multiplied (local) tourism revenue
- Significant rate of return to tax payer on expenditure!
- Are PES economically viable?
- If so payments need to contribute to financial viability of farms (financial return to farmer)

Regulatory Change Required?

- Current costings driven by WTO and CAP rules
- Income forgone and cost incurred = criteria for WTO green box and CAP rules
- Prevailing cost based payment model: same for all participants based on average production costs
- Results based/Value differentiated payment system: reflecting the presence of subjectively valued public goods (value based payments)
- Payment unit is qualitative hectare (qha) = object area * indicator estimates (Hansund, 2013)
- Argues: payment rate purely a normative/political matter- Citizens willingness to pay
- Results based or value based not restricted under current WTO rules (Hasund 2016)
 - Considered green box "non/minimal trade distorting" if at/below cost incurred and income foregone; (green box)
 - There is an EU ceiling for non exempted support-can be used to make payments greater than cost incurred and income foregone (amber box)
- Need to move towards quality market pricing: higher quality-higher payment

Regulatory Change Required?

- ▶ If they were changed to facilitate amber box payments Hasund 2016 highlights that EU rules would need to:
 - ▶ Set a limit to prevent unduly large payments to avoid unfairly favouring agriculture in one country and distorting trade,
 - ▶ Standardised methods needed for estimating the social value of environmental effects/result.
 - ▶ Perhaps facilitated by independent institute
- ▶ Have CAP rules impeded our RBAPS costings?

RBAPS: Costings Example



- ❑ Pure results/ Hybrid Model of AE payments
- ❑ Results payment based on 10 point scoring system
- ❑ Payments calculated on basis of additional costs and income foregone of the actions which would be generally necessary to achieve the results (i.e. top score)
- ❑ In RBAPS the cost of achieving the highest quality biodiversity target possible was calculated in three ways:
 1. Income forgone and additional costs under the threat of intensification (Opportunity cost associated with not intensifying)
 2. Opportunity costs for conversion to forestry.
 3. The full cost of management where risk of abandonment.

Calculation of payments rates



A. Threat assessment

Region	Primary threat	Secondary threat	Tertiary threat
County Leitrim	Conversion to forestry	Intensification	Abandonment
Shannon Callows	Intensification	Abandonment (rare)	-
Navarra, Spain	Intensification	Abandonment	Conversion to forestry

B. Payment rates based on:

Intensification	Conversion to Forestry	Abandonment
Income Forgone & Additional costs	Opportunity cost	Full cost of management

Pay increments designed to: *incentivise farmers to strive for higher scores AND ensure that medium scores were sufficient to cover cost of participation*

Additional considerations for payment calculations in RBAPS



- Substantial initial investment needed to bring some area to even a basic state
 - Once off restoration works (NPI) can be expensive
 - Measures required on long term rotation 5-10 years
 - Including them in annual results based payment may over / under pay farmers
- Consider non productive investments in design in blended/hybrid model
- Cost NPI = full costs associated with each action
- Considering Bonus payments for species presence



Leitrim Costings

Item	Description	Other Type	€/ha/yr
Income forgone cost for conversion to forestry	Cattle rearing, cattle other and sheep enterprises (NFS, all sizes)	Broadleaf	639.91
		Conifer	694.91
Intensification (IF, AC & TC)	Cattle rearing, cattle other, dairy sheep enterprises (NFS, all sizes)		274.22
Full cost of management	Labour and direct costs for Cattle rearing, cattle other and sheep enterprises (NFS, all sizes)		343.22

Leitrim Payments

€/ha	€0	€0	€0	€50	€110	€170	€230	€280	€320	€350
RBAPS Score	1	2	3	4	5	6	7	8	9	10



Discuss!

- ▶ Reasons current system works is that we are using national/wider regional gross margin/production figures (production losses and costs may be higher than actual in HNV system??)
- ▶ Forestry premia currently high relative to alternative opportunities from land
- ▶ Farmers willingness to accept
 - ▶ Seen as adequate payments (Differences in 3 pilots)
 - ▶ Dislike of forestry / willingness to continue farming-how long will this last?
- ▶ Do we need regulatory change?
- ▶ How logical are any costings?